UNITED STATES PATENT AND TRADEMARK OFFICE

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10/622,259	07/18/2003	Steven Michael Hausman	2002P20760US01	3269

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EXAMINER
HASSAN, AURANGZEB

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

4/17/2008 has been entered.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Examiner has provided a summary in order to better follow the rejection.

Claims 1 – 9, 11, 12, 14 – 22 and 26 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable
over Thomas et al (US Patent Number 5,649,001 hereinafter "Thomas") in view of Boggs et al (US
Publication Number 2001/0037491 hereinafter "Boggs").

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further
in view of Cisco Systems.

Claims 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of
Boggs further in view of Rostoker et al. (US Patent Number 6,978,319)

Claims 23 – 25 and 30 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in
view of Boggs further in view of Al-Ali (US Publication Number 2003/0167391).

(*Emphasis has been added* to claim limitations that recite terminology that require the ability to carry out
a certain function, however the claim limitations do not necessitate that the function be completed, *i.e.* the

terms **couplable** and **connectable** do not necessitate a coupling or connection but merely recite the ability to be coupled or connected.)

3.   **Claims 1 – 9, 11, 12, 14 – 22 and 26 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al (US Patent Number 5,649,001 hereinafter "Thomas") in view of Boggs et al (US Publication Number 2001/0037491 hereinafter "Boggs").**

4.   As per claim 1, Thomas teaches a system comprising: a cellular telephone modem (cellular phone system, column 3, lines 8 – 15); and a programmable cable (communication adapter cable, element 22, figure 1) comprising a first end **connectable** to a computer (communication interface device, element 20, figure 1) and a second end **connectable** to said cellular telephone modem (communication network/device, element 28, figure 1, cellular phone system, column 3, lines 8 – 15); said programmable cable adapted to store at least one of a plurality of configuration parameters comprising a PIN number (identification code, column 6, lines 15 – 20) a memory of said programmable cable distinct from said PLC (32, figure 1, column 9, lines 34 – 41); said programmable cable adapted to, in an operative embodiment, automatically configure said cellular telephone modem by communicating at least one of the configuration parameters to said cellular telephone modem (column 6, lines 15 – 25 and lines 38 – 46).

Thomas fails to specify the type of computer as being a PLC and a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (PLC attached to cable, paragraph [0331]) **connectable** to a programmable logic controller (PLC) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to one or ordinary skill in the art to combine the above teachings with Boggs. One of ordinary skill in the art would be motivated to make such modifications in order to provide higher performance in communications (paragraph [0027]).

Thomas teaches a cable with a memory means to store a plurality of operating values which correspond to operating characteristics of the given communication network (column 9, lines 34 – 41). Boggs teaches operational parameters to communicate a mode switch (paragraphs [0263 – 0268] describe switching between the two modes).

All of the component parts of Thomas and Boggs were known at the time of the applicant's claimed invention the only difference is the combination if the known elements in a single adapter cable thus it would have been obvious to one of ordinary skill in the art to combine all the elements in a single memory adapter cable to yield a predictable result of allowing communication between connectable devices.

The examiner notes that the applicant in the specification background, paragraph 2,

lines 1 and 2, states that a PLC is a type of **computer** (emphasis added) utilized in

control systems.

5.   As per claim 2, Thomas teaches a device comprising: a programmable cable

(communication adapter cable, element 22, figure 1) comprising a first end

connectable to a PLC (communication interface device, element 20, figure 1) and a

second end **connectable** to a network communications device (communication

network/device, element 28, figure 1), the network communications device further

couplable to a user interface device (cellular phone system, column 3, lines 8 – 15);

said programmable cable adapted to store at least one of a plurality of configuration

parameters; in an operative embodiment, said programmable cable adapted to

automatically configure the network communications device by communicating at least

one of a plurality of configuration parameters to the network communications device

comprising a PIN number (communication adapter cable identification code stored on

communication adapter cable, column 10, lines 47 – 59).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode

switch parameter adapted to cause a mode switch of said programmable cable (PLC

attached to cable, paragraph [0331]) **connectable** to a programmable logic controller

(PLC) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268]

describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

6.   As per claims 9, Thomas teaches a device comprising: a programmable cable comprising, a first end **connectable** to a network (**couplable** to a PLC), and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1); the network communications device further **couplable** to a user interface device (cellular phone system, column 3, lines 8 – 15); and said programmable cable programmable to store at least one of a plurality of configuration parameters comprising: a communication language (adapt the modem to a particular country's telephone network, column 1, lines 63 – 67, column 3, lines 1 – 2) and an identifying PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59, emphasis added).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable, paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

The Examiner asserts that the claim limitations only require the capability to communicate to the PLC but do not necessitate such limitations. Accordingly the programmable cable of Thomas communicates with a computer and network.

7.   As per claim 14, Thomas teaches a method comprising the activities of: providing a programmable cable comprising a first end and a second end, the first end **connectable** to a PLC (communication interface device, element 20, figure 1), the second end **connectable** to a cellular telephone modem (communication network/device, element 28, figure 1), a user interface device **couplable** to a network comprising the programmable cable, the PLC, and the cellular telephone modem (cellular phone system, column 3, lines 8 – 15); said programmable cable adapted to store at least one of a plurality of configuration parameters (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59); and automatically configuring the cellular telephone modem by the programmable cable (handshaking and connectivity via communication interface device upon automatic verification of the identification code, column 6, lines 15 – 48).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable, paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

8.   As per claim 26, Thomas teaches a method comprising the activities of: providing a programmable cable comprising a first end **connectable** to a network (communication interface device, element 20, figure 1) and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1), a user interface device **couplable** to a network (cellular phone system, column 3, lines 8 – 15); and automatically communicating from the programmable cable to the network communicating device a PIN number and at least one of a plurality of configuration parameters (handshaking and connectivity via communication interface device upon automatic verification of the identification code, column 6, lines 15 – 48, communication adapter cable identification code stored on communication adapter cable in use for cellular telephone network, column 10, lines 47 – 59).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable, paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

The Examiner elaborates that Thomas teaches a programmable cable **couplable** to a network. Thomas teaches a general network and as the claim limitations stand in claim 26, the term **couplable** does not necessitate all the proceeding elements but rather puts forth a capability to be coupled to such a network. As claim 26 is a method the claim limitation **couplable** does not necessitate the particular network comprising particular network elements but rather necessitates the capability of coupling to a network in general which is Thomas' cellular phone system.

9.   Thomas modified by the teachings of Boggs as applied in claim 2 above as per claims 3, 4, 6 – 8, Thomas teaches a device wherein the network interface device comprises a multitude of end interfaces (cellular phone system: column 3, lines 8 – 15; telephone network: column 1, lines 65 – 67, column 2 lines 1 – 2; network and Internet: column 8, lines 42 – 59; cellular phone system: column 3, lines 8 – 15).

10.   Thomas modified by the teachings of Boggs as applied in claim 2 above as per claim 5, Thomas teaches a device wherein the configuration parameters further comprise a setup string for the network interface device (column 8, lines 45 – 58).

11.   As per claim 11, Thomas teaches a device wherein in an operative embodiment, said programmable cable adapted to automatically configure the network communications device by communicating at least one of the plurality of configuration parameters to the network communications device (column 8, lines 45 – 58).

12.   As per claim 12, Thomas teaches a device wherein said second end of said

programmable cable comprises an RS232 network connector (communication over an

RS232 serial port, column 1, lines 31 – 37).

13.   Thomas modified by the teachings of Boggs as applied in claim 14 above as per

claims 15 and 16, Thomas teaches a method wherein said automatically configuring

activity occurs during/after a power-cycling of the programmable cable (power-cycling

through connection and interchanging of adapter cables and automatically configuring

through periodic polling, column 4, lines 17 – 63).

14.   Thomas modified by the teachings of Boggs as applied in claim 14 above as per

claim 17, Thomas teaches a method comprising automatically communicating, from the

programmable cable to the network communications device at least one of the plurality

of configuration parameters (column 8, lines 42 – 59).

15.   As per claims 18 and 27, Thomas teaches a method comprising: via the user

interface device through the network, setting at least one of the plurality of

programmable cable configuration parameters comprising a communication language

(adapt the modem to a particular country's telephone network, column 1, lines 63 – 67,

column 3, lines 1 – 2) and an identifying PIN number (communication adapter cable

identification code stored on communication adapter cable, column 10, lines 47 – 59).

Boggs teaches said programmable cable programmable to store **at least one** of

a plurality of configuration parameters comprising: a mode of operation, a PPI protocol,

and a data transfer speed (PPI, mode, and baud rates, paragraph [0251]).

(Emphasis added)

16.   Thomas modified by the teachings of Boggs as applied in claim 14 above as per

claims 19 – 21, Thomas teaches a method further comprising initializing the

programmable cable using the user interface device through the network by setting at

least on of the plurality of configuration parameters comprising a network

communications device setup string and a PIN number (communication adapter cable

identification code stored on communication adapter cable, column 10, lines 47 – 59).

17.   Thomas modified by the teachings of Boggs as applied in claim 14 above as per

claim 22, Thomas teaches a method wherein said activity of automatically configuring

the cellular telephone modem by the programmable cable further comprises

communicating at least one of a plurality of configuration parameters, comprising

cellular telephone modem setup string and a PIN number, to the cellular telephone

modem (handshaking and connectivity via communication interface device upon

automatic verification of the identification code, column 6, lines 15 – 48, communication

adapter cable identification code stored on communication adapter cable in use for

cellular telephone network, column 10, lines 47 – 59).

18.   As per claim 28, Thomas teaches a method wherein the configuration

parameters communicated to the network communications device further comprise a

network communications device setup string (column 8, lines 45 – 58).

19.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Thomas in view of Boggs further in view of Cisco Systems.

20.   Thomas modified by the teachings of Boggs and Cisco as applied to claim 9

above, as per claim 10, Thomas teaches a device comprising: a programmable cable

comprising, a first end **connectable** to a network (**couplable** to a PLC), and a second

end **connectable** to a network communications device (communication network/device,

element 28, figure 1, emphasis added)

Thomas in view of Boggs does not explicitly teach token holding.

Cisco teaches a device wherein said programmable cable further adapted to, in

an operative configuration, serve as a token holding master on the network adapted to

multiplex networked communications with the PLC (each station holding token, Section:

Token Ring Operation).

It would have been obvious to one of ordinary skill in the art at the time of the

applicant's invention to modify the combination of Thomas and Boggs with the above

teachings of Cisco Systems. One of ordinary skill in the art would have been motivated

to make such modification in order to allow reduce collisions of data on network

(Section: Review Questions).

21.   **Claims 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable**

over Thomas in view of Boggs further in view of Rostoker et al. (US Patent

Number 6,978,319).

22.   As per claim 13, Thomas teaches a device wherein said second end of said

programmable cable comprises a connector (can be utilized with wide variety of

communication protocols and a variety of networks, column 3, lines 47 – 54).

        Thomas fails to teach a connector that which comprises a USB network

connector.

        Rostoker et al. analogously teaches a device wherein said second end of said

programmable cable comprises a connector comprising a USB network connector

(column 5, lines 4 – 11).

        It would have been obvious to one of ordinary skill in the art at the time of the

applicant's invention to modify the combination of Thomas and Boggs with the above

teachings of Rostoker et al. One of ordinary skill in the art would have been motivated

to make such modification in order to allow for "plug-and-play" further allowing

transparency on the user end (column 2, lines 63 – 67).

23.   Thomas modified by Boggs further modified by the teachings of Rostoker et al.

as applied to claim 13 above, as per claim 29, Rostoker et al. teaches a method further

comprising monitoring data traffic through the programmable cable using a set of status

indicators (status of data present through protocols where the controller notes

indication, figure 8).

24.   Claims 23 – 25 and 30 – 32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Thomas in view of Boggs further in view of Al-Ali (US

Publication Number 2003/0167391).

25.   As per claims 23 – 25 and 30 – 32, the combination of Thomas and Boggs

teaches a method further comprising communications between the user interface device

and the PLC (Thomas: computer, column 3, lines 47 – 54: Boggs: PLC paragraph

[0331]), between the programmable cable and the PLC and between the programmable

cable and the user interface device (Thomas: figure 1).

The combination of Thomas and Boggs fails to explicitly teach the limitation of

encryption along the communication lines lying therein between.

Al-Ali teaches analogously a method comprising encryption along a cable

communicating between interfaces (encryption interface cable, element 700, figure 6).

It would have been obvious to one of ordinary skill in the art at the time of the

applicant's invention to modify the combination of Thomas and Boggs with the above

teachings of Al-Ali. One of ordinary skill in the art would have been motivated to make

such modification in order to allow for exclusive compatibility between interfaces without

the necessity of hardware modifications (paragraph [0027]).

Response to Arguments

26.   Applicant's arguments filed 12/19/07 have been fully considered but they are not

persuasive. Applicant argues: Boggs does not teach "said programmable cable adapted

to store", "a plurality of configuration parameters", that comprise "a mode switch

parameter adapted to cause a mode switch of said programmable cable to select

between a Freeport mode and a PPI mode" along with combinability and complete

limitations.

27.   As per the Applicant's arguments, the Examiner respectfully disagrees. In

response to applicant's arguments against the references individually, one cannot show

nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA

1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

        The Examiner has cited a rationale to elaborate on the combinability of the

known elements at the time of the claimed invention.

        In reference to the limitations argued by the Applicant, the Examiner notes that

Boggs is relied upon for a Freeport mode and PPI mode. As cited in the previous action

Boggs teaches a switching of a Freeport PPI mode in paragraph [0068], which provides

a detailed description of step S3012 of figure 30a that shows a switching of a Freeport -

PPI mode. As best understood by the specification of the current application,

paragraphs [0011-0013], a Freeport mode is a variation of a first PPI and second PPI

protocol. Teachings of a programmable cable are relied upon from Thomas. Clearly

one of ordinary skill in the art would recognize that Boggs teaches a mode switching of

Freeport PPI mode. Furthermore in light of the rationale, Thomas teaches a memory in

the adapter circuitry with the capability of storing operational parameters such as those

of Boggs. Rationale for combinability has been cited as based on the allowing the

connectable devices to the functionally communicate.

Conclusion

28.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to AURANGZEB HASSAN whose telephone number is

(571)272-8625. The examiner can normally be reached on Monday - Friday 9 AM to

5:30 PM.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tariq Hafiz can be reached on (571)272-6729. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH

/Tariq Hafiz/
Supervisory Patent Examiner, Art Unit 2182